

REXON ERA

BASIC CHARACTERISTICS



Light-weight steel dimensional construction of high quality, trouble-free and simple operation are the characteristics that make the turnstile **REXON-ERA** to be suitable solution for applications where are required a maximum security and fully automatic and unmanned identification of passing persons. **REXON ERA** is an economical version of a robust turnstile **REXON-DEA**. Anti-corrosive prevention of all components and high-quality surface finish treatment of the turnstile **REXON-ERA** are the main features of a long-life and reliable running not only in interior but also during extreme conditions of outdoor installation. Functional design, constructive and colour variability enables to create from the turnstile **REXON-ERA** a modern part of entrance control system. Turnstile **REXON-ERA** is a bi-directional turnstile with electronic passage control that ensures a comfortable and safe passage to one person. Sophisticated control electronics enables easy setting of its own operating mode and at the same time it makes possible to communicate with different types of identification and access control systems.

Types of turnstiles:

With reference to function of the turnstile, customer's requirements and a type of drive unit, the turnstile **REXON-ERA** is offered in two variations in accordance with number of wings on turnstile and gate rotation angel for unblocking of one passage :

• angle 120° (3 wings)

• angle 90° (4 wings)

Turnstile **REXON-ERA** is offered with the following types of drive units:

Motor-drive unit MT (STANDARD)

Motorized turnstile **REXON-ERA** is characteristic by its high comfort, reliable and service-free running:

- Effective blocking system in combination with motor-drive unit
- Automatically adapts the rotation to the speed of passing person
- High safeness is ensured by high-speed stop in case of detection of any obstructions
- Silent and fluent running

Motor-drive unit is supplied in two variants.

- 1) **FAIL-LOCK:** turnstile is blocked during the power failure
- 2) **FAIL-SAFE:** turnstile is unblocked for free-to-turn during the power failure

Electromechanical unit TE2 (only with type 120°)

The turnstile activity is controlled by electromechanical unit with the following functions:

- Active blocking system based on electromagnets
- Self-centering position mechanism to ensure full turnstile turning into the basic position
- Hydraulic shock absorber for the fluent and quiet passing
- Blocking system prevents the turnstile reverse during the passing
- Possible unit configuration during power failure:
 - 1) permanently blocked
 - 2) unblocked for free-to-turn

Mechanical unit

Mechanical unit has the same characteristics as electromechanical unit with the difference that turnstile operation is not controlled by any devices. This type of turnstile is used for regulation and monitoring the number of passing persons.

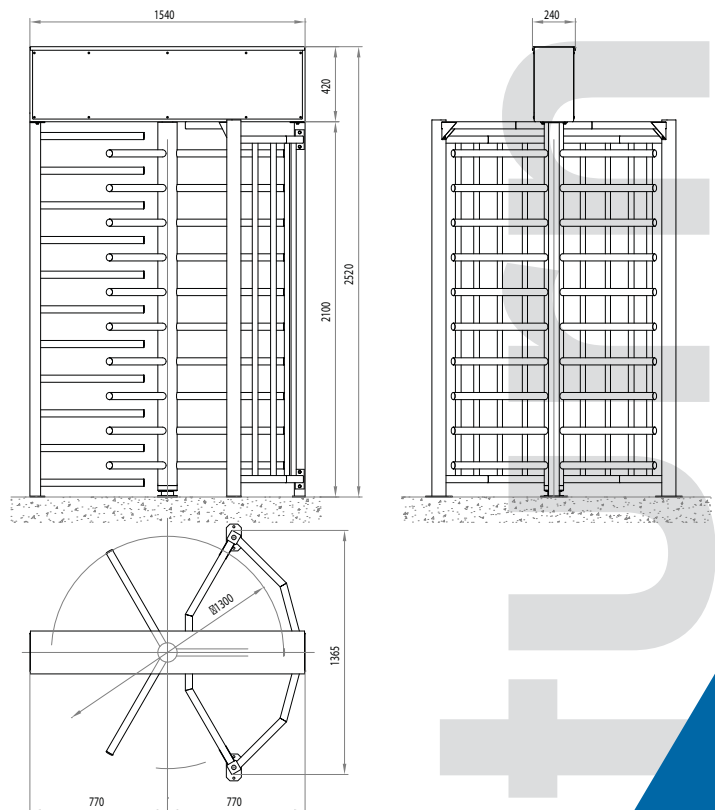
MATERIALS AND SURFACE TREATMENT OF TURNSTILE:

Top panel: steel sheet, thickness 3 mm, surface is finished by powder coating (standard: ral 9006 pe)

Cover of top panel: steel sheet, thickness 1.5 Mm, surface finished by powder coating (standard: ral 9006 pe)

Rotor: steel tube, \varnothing 108mm, surface finished by hot-dip galvanized

Arms of rotor: steel tube, \varnothing 40mm, surface finished by hot-dip galvanized



Internal barrier: closed thin-walled profile and steel tube \varnothing 40 mm, surface finished by hot-dip galvanized

External barrier: closed thin-walled profiles that are finished by hot-dip galvanized

Other mechanical parts are treated by galvanization or blackening.

INTERFACE:

Turnstiles are controlled by microprocessor control electronics that communicates with superior control system by the help of the following TTL input and output signals:

- For each passage direction one activating input
- Output for signalling situation the turnstile in operation (busy)
- Two outputs signalling the actual passage through turnstile in existing direction (especially used for antipassback function)

Electronics of electromechanical drive unit is except TTL outputs equipped also with output relays.

When the type FS motor-drive unit is used, the electronics is equipped for each way of direction with input for permanent activation of free passing in existing direction and enables the time setting to realize the passage through turnstile at 6 or 10s (Time-out). Control electronics is equipped with switch-off acoustic position signals the turnstile is running (BUSY). Control electronics is protected against the short-circuit, overloading or mismatch of polarity.

Turnstile operation during power failure

TE2 electromechanical drive unit: when is set-up the configuration, the turnstile will be automatically unblocked and free-to-turn in both directions if the power failure occurs.

Fail-safe motor-drive unit: during power failure the turnstile will be automatically unblocked and free-to-turn in both directions.

Fail-lock motor-drive unit: when the backup device is used, it is possible to ensure the standard turnstile functions for the duration of 6 hours without possibility of automatic unblocking and free rotation.

Operating modes

By external signal from identification system or remote control panel it is possible to turn round the turnstile at rated angle and by that way enable the passing to one person. For each way of direction it is possible to define different operating modes:

1. free passage – only fail-safe drive unit
2. controlled passage
3. permanently blocked

This setting can be realized for any direction eventually for both directions at the same time.

BASIC TECHNICAL PARAMETERS

Tabulka elektrických parametrů pohonných jednotek

Type of drive unit	Rated supply voltage	Power supply at the basic turnstile mode		
		Standby	BUSY	Transit
FAIL-LOCK motor	12VDC	0,8W	10W	20 - 30W
FAIL-SAFE motor	12VDC	1W	1W	15 - 20W
Electromechanical without power blocked	24VAC/DC	2,5W	8W	8W
Electromechanical without power released	24VAC/DC	12W	8W	8W

- standard range of working temperatures +10° ... +50° C
- Range of working temperature with heating module: -25°...+50° C
- Range of storage temperatures: 0° +50° C
- Maximum relative humidity 80% (non-aggressive environment)
- MCBF: 3.000.000 cycles (mean cycles before failure)



The throughput depending on type of control electronics, operating mode and the way of identification of passing people, is between 15 to 30 persons per minute.

Increase of power supply on motor drive unit with automatic warning is 24W. The power supply can be also increased by using the accessories.

ACCESSORIES

Holders for accessories:

Holders for placing the readers of identification systems or other accessories (for example: TrafficLight information panel).

Lighting:

Lighting of turnstile interior.

Anchoring frame:

Steel frame to fix the turnstile, for example through the interlocking pavement.

TrafficLight information panel:

- information about the turnstile trafficability in set direction
- information about transit permission based on evaluation of identification system

Touch control panel

- turnstile manual control
- turnstile manual unblocking

Back-up accumulator:

During a power failure the accumulator ensures its continuous operation for a period of minimally 6 hours.

Counter:

Turnstile can be equipped with the passage counter.

Identification systems:

For verification of access right of passing persons it is possible to connect to the turnstile REXON - ERA any type of barcode, magnetic card, proximity card, smartcard, biometric reader etc.

Specific variants:

- stainless steel design
- custom colour powder coating according to RAL